UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,730	06/23/2003	Todd F. Pfleiger	MSFT-1743/303844.1	8726

41505   7590   08/22/2007
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER
DARNO, PATRICK A

ART UNIT	PAPER NUMBER
2163	

MAIL DATE	DELIVERY MODE
08/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

4

	Application No.	Applicant(s)
Office Action Summary	10/601,730	PFLEIGER ET AL.
	Examiner	**Art Unit**	
	Patrick A. Darno	2163	'

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 June 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-16</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 June 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 08172007

DETAILED ACTION

1.   No new claims have been added. No claims have been cancelled. Claims 1, 3, 10, and

11 have been amended. Therefore, claims 1-16 are pending in this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-4 and 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Number 5,873,080 issued to Anni Rosa Coden et al. (hereinafter "Coden") further in view

of U.S. Patent Number 6,795,832 issued to Vernon E. McGeorge, Jr., et al. (hereinafter

"McGeorge").

Claims 1 and 11:

Regarding claims 1 and 11, Coden discloses a method of distributing portions of a query

over two or more execution engines *(Coden: Fig. 1 and Fig. 2 and column 3, lines 49-51)*, the method

comprising:

receiving an input query into a first analysis engine of serially cascaded analysis engines

(Coden: column 3, lines 40-43 and Fig. 1, 140, 170; The Coden reference contains a plurality of serially cascaded

analysis engines. The serially cascading analysis engines being at the EUIS (Fig. 1, 120), the next analysis engine

in the serial chain is the Query Interface (Fig. 1, 130), then any one of the customized APIs (text, parametric, image,

etc. – Fig. , 152, 154, 156 respectively), and then the corresponding search engines (Fig. 1, 162, 164, 166). Note

specifically that the input query is received into the serially cascading chain described above, and follows the serially

cascading chain until the query reaches its appropriate destination.);

identifying with the first analysis engine, a portion of the input query that can be

processed by a first execution engine *(Coden: column 3, lines 43-51 and column 6, lines 46-53)*;

compiling the identified portion of the input query forming a first compiled portion

(Coden: column 3, lines 51-53);

rewriting the input query to form a first rewritten query wherein the identified portion of

the input query is removed from the input query *(Coden: column 6, lines 51-55 and column 7, lines 52-55*

and column 3, lines 55-57);

passing an entire portion of the first written query to a second analysis engine of the

serially cascaded analysis engines *(Coden: column 6, lines 32-36 and column 3, lines 51-33 and column 57-*

58);

identifying with the second analysis engine, a portion of the first rewritten that can be

processed by a second execution engine *(Coden: column 3, lines 43-57)*; and

compiling the identified portion of the first rewritten query generating a second compiled

portion wherein the input query is distributed over the first execution engine an the second

execution engine for sequential execution *(Coden: column 6, lines 51-55 and column 3, lines 49-53)*.

The Coden reference does not explicitly disclose wherein a first inserted placeholder

replaces a portion of a query. However, Coden does explicitly suggest that a first analysis engine

(Coden: Query Interface; Fig. 1 - 130) provides <u>any</u> formatting necessary to make a query object

compatible with a second, serially cascaded, analysis engine *(Coden: Search Engine API; Fig. 1 - 152,*

154, or 156; See comments above describing the chain of serially cascaded analysis engines disclosed by Coden.)

(Coden: column 6, lines 53 - 55).

However, McGeorge discloses wherein a first inserted placeholder replaces or is added to a portion of a query *(McGeorge: column 4, line 57 – column 5, line 3; Inserting a placeholder into a query, as claimed by the Applicant, appears to simply be inserting a string into a query in order to replace an already existing portion of the original query. As can be seen by the cited portion of the reference, McGeorge clearly discloses inserting a string in place of an already existing portion of an original search query.).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Coden with the teachings of McGeorge noted above for the purpose of inserting a string into a query in order to replace an already existing portion of the original query *(McGeorge: column 4, line 57 – column 5, line 3).* The skilled artisan would have been motivated to improve the teachings of Coden per the above such that a query can be modified by a predefined set of parameter strings at any point in time during a program *(McGeorge: column 5, lines 14-16).* This flexibility provides for a query which can be augmented or overridden during execution to more appropriately carry out a desired task *(McGeorge: column 5, lines 21-27).*

Claim 2:

Regarding claim 2, the combination of Coden and McGeorge discloses all the elements of claim 1, as noted above, and Coden further discloses rewriting the first rewritten query to form a second rewritten query wherein the identified portion of the first rewritten query is removed from the first rewritten query *(Coden: column 11, line 65 - column 12, line 14).*

The Coden reference does not explicitly disclose wherein a second inserted placeholder replaces a portion of a query. However, Coden does explicitly suggest that a first analysis engine

(Coden: Query Interface; Fig. 1 - 130) provides any formatting necessary to make a query object

compatible with a second, serially cascaded, analysis engine *(Coden: Search Engine API; Fig. 1 - 152,*

154, or 156; See comments above describing the chain of serially cascaded analysis engines disclosed by Coden.)

(Coden: column 6, lines 53 - 55).

However, McGeorge discloses wherein a second inserted placeholder replaces or is added

to a portion of a query *(McGeorge: column 4, line 57 – column 5, line 3; Inserting a placeholder into a query, as*

claimed by the Applicant, appears to simply be inserting a string into a query in order to replace an already existing

portion of the original query. As can be seen by the cited portion of the reference, McGeorge clearly discloses

inserting a string in place of an already existing portion of an original search query.).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the teachings of Coden with the teachings of McGeorge noted above for the

purpose of inserting a string into a query in order to replace an already existing portion of the

original query *(McGeorge: column 4, line 57 – column 5, line 3).* The skilled artisan would have been

motivated to improve the teachings of Coden per the above such that a query can be modified by

a predefined set of parameter strings at any point in time during a program *(McGeorge: column 5,*

lines 14-16). This flexibility provides for a query which can be augmented or overridden during

execution to more appropriately carry out a desired task *(McGeorge: column 5, lines 21-27).*

Claim 3:

Regarding claim 3, the combination of Coden and McGeorge discloses all the elements of

claim 1, as noted above, and Coden further discloses wherein the rewriting act further comprises

wrapping the second compiled portion into the first compiled portion of the input query to

produce a nested query for sequential execution *(Coden: column 9, lines 11-28).*

Claims 4 and 14:

Regarding claims 4 and 14, the combination of Coden and McGeorge discloses all the elements of claim 1, as noted above, and Coden further discloses wherein the first compiled portion and the second compiled portion may be executed over different data sources *(Coden: column 7, lines 5-13)*.

Claims 6 and 12:

Regarding claims 6 and 12, the combination of Coden and McGeorge discloses all the elements of claim 1, as noted above, and Coden further discloses:

executing partially the second compiled portion using the second execution engine forming the combination of second interim results and the first placeholder *(Coden: column 3, lines 34-49 and column 2, lines 39-44)*;

generating a call from the second execution engine to the first execution engine requesting the data corresponding to the first placeholder *(Coden: column 7, lines 8-20 and column 2, lines 39 - 44)*;

executing the first compiled portion using the first execution engine to form first interim results corresponding to the first placeholder and satisfying the call *(Coden: column 8, lines 23-41)*;

providing the first interim results to the second execution engine *(Coden: column 8, lines 46-62)*;

substituting the first interim results for the first placeholder forming the combination of second interim results and first interim results comprising combined input query results *(Coden: column 11, lines 51 - 67 and column 12, line 3-14 and column 10, lines 20-24)*.

Claims 7, 9, and 13:

Regarding claims 7, 9, and 13, the combination of Coden in view of Neal teaches wherein

the first execution engine and the second execution engine operate on queries comprising

different data models *(Coden: column 12, lines 17-25)*.

Claims 8 and 15:

Regarding claims 8 and 15, the combination of Coden in view of Neal teaches executing

partially the first compiled portion using the first execution engine forming first interim results

(Coden: column 3, lines 34-49 and column 2, lines 39-44);

generating a call from the first execution engine to the second execution engine

requesting the data corresponding to an unidentified portion of the input query *(Coden: column 7,*

lines 8-20 and column 2, lines 39 - 44);

executing the second compiled portion using the second execution engine to form second

interim results and satisfying the call *(Coden: column 8, lines 23-41)*;

providing the second interim results to the first execution engine *(Coden: column 8, lines 46-*

62); and

combining the first interim results with the second interim results to form combined input

query results *(Coden: Fig. 7, all features and column 12, lines 15 - 17)*.

Claim 10:

Claim 10 is rejected under the same reasons set forth in the rejection of claim 1. In

addition to the portions cited in the rejection of claim 1 above, the Examiner also directs the

Applicant to Coden: column 7, lines 6-8 and column 7, lines 33-38 and column 11, lines 27-32

and column 15, lines 55-60 and column 9, lines 11-18.

3.   Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coden in

view of McGeorge and further in view of U.S. Patent Number 6,697,799 issued to Michael Renn

Neal et. al (hereinafter "Neal").

Claims 5 and 16:

Regarding claims 5 and 16, the combination of Coden and McGeorge discloses all the

elements of claim 1, as noted above, and Coden further discloses wherein a first analysis engine

is at least a structure query language based engine *(Coden: column 6, lines 11-13)* and a second

analysis engine *(Coden: See rejection of claim one which specifically points out numerous serially cascaded*

analysis engines.).

Coden does not explicitly disclose an extensible markup language based engine.

However, in addition to a list of predefined included engines, the Coden reference specifically

suggests that other types of engines can be included *(Coden: column 6, lines 7-8)*.

However, Neal discloses an extensible markup language based engine *(Neal: column 3, lines*

64-66).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the previously mentioned combination with the teachings of Neal noted

above because the references are analogous art with respect to search queries. The skilled artisan

would have been motivated to improve the previously mentioned combination per the above in

order to create a more efficient way of searching, navigating, and manipulating, and exchanging

data.

Response to Arguments

Examiner Notes:

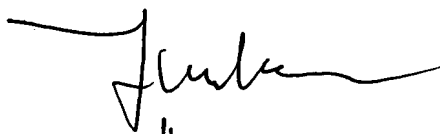Applicant's arguments are moot in light of new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Patrick A. Darno whose telephone number is (571) 272-0788.

The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hong Vy

For SPE Dou Wong

PAD

Patrick A. Darno
Examiner
Art Unit 2163